



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/065,775 | 11/18/2002 | A. David Shay | 17836-55728 | 2409 |

24728 7590 04/27/2007
MORRIS MANNING MARTIN LLP
3343 PEACHTREE ROAD, NE
1600 ATLANTA FINANCIAL CENTER
ATLANTA, GA 30326

| |
|----------|
| EXAMINER |
|----------|

BROWN, CHRISTOPHER J

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2134

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 04/27/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|----------------------------------|--------------------------------|--|
| Office Action Summary | Application No. 10/065,775 | Applicant(s) SHAY, A. DAVID | |
| | Examiner Christopher J. Brown | Art Unit 2134 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 118-138, 140-142 and 144-162 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 118-138, 140-142 and 144-162 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Request for Continued Examination has been entered and processed.

Response to Arguments

Applicant's arguments with respect to claims 118, and 140 have been considered but are moot in view of the new ground(s) of rejection in view of Doi US 6,742,118.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 118 and 140 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 118 and 140 both contain the limitation that “after the construction of but before the sending of a data packet from the source node to the destination node as part of the communication attempt, intercepting the data packet at the source node;”.

While it is clear that the method of assigning identifiers happens at the source node (prior to sending) it is unclear in the instant specification that this happens after construction but before sending. It appears to the examiner that no interception takes place. The packet is simply constructed at the source node. Fig 2 (210 “Construct and send SYN packet using

Art Unit: 2134

session GKI/SKI". At most the examiner asserts that the insertion of identifiers occurs after a "connection request" (Instant Spec. [0094]) or after authentication of the SID (Instant Spec. [0062]) but not after the construction of a data packet. The examiner invites the applicant to illustrate where language can be found in the instant specification to support this claim limitation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 118,119,121,125-128, 135-138, 140-142, 144, 147, 152, 159-162 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doi US 6,742,118 in view of Cunningham US 6,219,786.

Doi teaches after the construction of but before the sending of a data packet from the source node to the destination node as part of a communication attempt, intercepting the data packet at the source node (intercepting the data from the storage device by the data processing unit to add ID information) (Fig 1, 95, 93; Col 5 lines 10-19).

Doi teaches assigning one or more identifiers to the communication attempt (user ID, unit name) (Col 4 lines 15-35). Doi teaches that the identifiers include at least of of a user

identifier (user ID) or a system identifier (unit name and serial number) (Col 4 lines 15-35). Doi teaches the system identifier (SID) is associated with the hardware of the source node making the communication attempt (ID contains manufacturer, unit name and specific serial number of the unit) (Col 4 lines 15-25). Doi teaches that the user identifier (UID) is associated with a specific authorized user of the source node (user ID, charged to use node) (Col 4 lines 1-5). Doi teaches inserting one or more identifiers assigned to the communication attempt into a header of the data packet to create a modified data packet (ID information in packet header), (Col 6 lines 1-8, Fig 4). Doi does not teach interception of modified data to permit or deny communication as a function of the one or more identifiers.

Cunningham teaches intercepting packet data from a source node within a computer network after it has been sent by the source node but before it reaches the destination node (intercepting packets via a passive access control system or gateway access control system)(Col 6 lines 1-10, (Col 7 lines 15-18,). Cunningham teaches extracting one or more identifiers from a packet (single packet low level information, source, destination addresses, and user data) (Col 7 lines 15-18, Col 7 line 67 to Col 8 line 3). Cunningham teaches permitting the communication attempt by the source node with the destination node as a function of the one or more identifiers extracted from the header of the data (access determination based on source and destination IP addresses, allowing connection or not) (Col 9 lines 1-7, Col 10 lines 37-42). It would have been obvious to one of ordinary skill in the art to use the ID in packet headers of Doi with the filtering system of

Art Unit: 2134

Cunningham so that the system could apply rules quickly using low level information, (Cunningham Col 8 lines 1-3, Col 10 lines 5-10).

As per claim 119, Doi does not teach filtering. Cunningham teaches forwarding the packet to the destination node, (allowing connection)(Col 9 lines 1-5).

As per claim 121, 147 Doi teaches the SID is computed based on one or more constant identifiers obtained from the hardware of the source node (serial number) (Col 4 lines 20-25).

As per claim 125, 152 Doi does not teach UDP. Cunningham teaches that the header may be a UDP packet and header (Col 7 lines 2-5).

As per claim 126, and 128, 159, 160, Doi does not teach logging. Cunningham teaches logging the one or more identifiers from the header of the modified data packet in a database (storage logs maintained for all transaction data or subsets of data), (Col 9 lines 60-65).

As per claim 127, 161 Doi does not teach alerting a network administrator. Cunningham teaches alerting a network administrator (sending an email, raising an alert in a predetermined manner) (Col 11 lines 5-10).

Art Unit: 2134

As per claims 135-137, Doi does not teach interception between source and destination. Cunningham teaches comparing ID's to rules in order to determine if communication between source and destination nodes is permitted or not permitted, (including source and destination identifiers, usernames, workgroups, workstation addresses), (Col 8 line 55 to Col 9 line 10).

As per claim 138, Doi teaches modified packets, Doi does not teach interception between source and destination. Cunningham teaches evaluating permission of a communication attempt based on receipt of a single packet (first packet) (Col 7 line 65 to Col 8 line 3).

As per claim 140, Doi teaches after the construction of but before the sending of a data packet from the source node to the destination node as part of a communication attempt, intercepting the data packet at the source node (intercepting the data from the storage device by the data processing unit to add ID information) (Fig 1, 95, 93; Col 5 lines 10-19).

Doi teaches assigning one or more identifiers to the communication attempt (user ID, unit name) (Col 4 lines 15-35). Doi teaches that the identifiers include at least of of a user identifier (user ID) or a system identifier (unit name and serial number) (Col 4 lines 15-35). Doi teaches the system identifier (SID) is associated with the hardware of the source node making the communication attempt (ID contains manufacturer, unit name and specific serial number of the unit) (Col 4 lines 15-25). Doi teaches that the user identifier (UID) is associated with a specific authorized user of the source node (user ID,

Art Unit: 2134

charged to use node) (Col 4 lines 1-5). Doi teaches inserting one or more identifiers assigned to the communication attempt into a header of the data packet to create a modified data packet (ID information in packet header), (Col 6 lines 1-8, Fig 4).

Doi does not teach interception of modified data to permit or deny communication as a function of the one or more identifiers.

Cunningham teaches intercepting packet data from a source node within a computer network after it has been sent by the source node but before it reaches the destination node (intercepting packets via a passive access control system or gateway access control system)(Col 6 lines 1-10, (Col 7 lines 15-18,). Cunningham teaches extracting one or more identifiers from a packet (single packet low level information, source, destination addresses, and user data) (Col 7 lines 15-18, Col 7 line 67 to Col 8 line 3). Cunningham teaches logging the one or more identifiers from the header of the modified data packet in a database (storage logs maintained for all transaction data or subsets of data), (Col 9 lines 60-65). Cunningham teaches forwarding the packet to the destination node,(access determination based on source and destination IP addresses, allowing connection or not) (Col 9 lines 1-7, Col 10 lines 37-42). It would have been obvious to one of ordinary skill in the art to use the ID in packet headers of Doi with the filtering system of Cunningham so that the system could apply rules quickly using low level information, (Cunningham Col 8 lines 1-3, Col 10 lines 5-10).

As per claim 141, Doi teaches assigning one or more identifiers to the communication attempt (user ID, unit name) (Col 4 lines 15-35). Doi teaches that the identifiers include

at least of of a user identifier (user ID) or a system identifier (unit name and serial number) (Col 4 lines 15-35). Doi teaches the system identifier (SID) is associated with the hardware of the source node making the communication attempt (ID contains manufacturer, unit name and specific serial number of the unit) (Col 4 lines 15-25). Doi teaches that the user identifier (UID) is associated with a specific authorized user of the source node (user ID, charged to use node) (Col 4 lines 1-5). Doi teaches inserting one or more identifiers.

As per claims 142, 162 Cunningham teaches comparing UIDS with authorized UIDS associated with the destination node, and comparing SID's with a plurality of authorized SUDs associated with the destination node and taking action based on said comparisons (comparing ID's to filter rules of users and equipment in order to determine if communication between source and destination nodes is permitted), (Col 8 line 55 to Col 9 line 35).

As per claim 144, Doi teaches adding identifiers in addition to standard header information (intercepting the data from the storage device by the data processing unit to add ID information) (Fig 1, 95, 93; Col 5 lines 10-19).

Claims 120, 122-124, 145, 146, 148-151 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doi US 6,742,118 in view of Cunningham US 6,219,786 in view of Hayes US 2004/0215771.

Art Unit: 2134

As per claim 120, 122-124, 145, 146, 148-151 the previous Doi-Cunningham combination does not teach specific packet protocols.

Hayes teaches modifying the sequence number and acknowledgement number of a TCP/IP header of a SYN packet (modifying values to make a combined validation key), [0011], [0012]. It would have been obvious to one of ordinary skill in the art to use the SYN header of Hayes with the Doi-Cunningham combination because it allows inclusion of data without affecting the packets function [0009].

Claims 129-134, 153-158 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doi US 6,742,118 Cunningham US 6,219,786 in view of Edgett US 5,796,942.

As per claims 129-134, and 153-158 The previous Doi-Cunningham combination teaches modification of packets with one or more identifiers (Doi Col 4 lines 15-35). The previous Doi-Cunningham combination does not teach encryption.

Edgett teaches an encryption and decryption system for identifiers including using key index values, and applying said key (encryption and of a password using a key, and including the key index with the encrypted password so that the decryption server can decrypt the password using the key) [0052].

It would have been obvious to one of ordinary skill in the art to use the key index system of Edgett with Cunningham because encryption increases security and the key index system prevents any keys from being transmitted.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher J. Brown whose telephone number is (571)272-3833. The examiner can normally be reached on 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571)272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher Brown

4/24/07

A handwritten signature in black ink, appearing to be 'CJB', written in a cursive style.